

KOREAN PATENT APPLICATION  
UNDER SERIAL NO. 10-2002-0077988

I, THE UNDERSIGNED, HEREBY DECLARE :  
THAT I AM CONVERSANT WITH BOTH THE KOREAN AND THE ENGLISH  
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KOREAN PATENT APPLICATION UNDER

SERIAL NO.: 10-2002-0077988

FILED ON: DECEMBER 9, 2002

IN THE NAME OF: LG ELECTRONICS INC.

FOR: MESSAGING SERVICE METHOD OF  
MULTI-MEDIA

IN WITNESS WHEREOF, I SET MY HAND HERETO

THIS 5TH DAY OF JUNE, 2008

BY



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LEE, SHIN SOOK

[Translation]

PATENT APPLICATION

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Title of the Invention : MESSAGING SERVICE METHOD OF MULTI-MEDIA

Applicant : LG ELECTRONICS INC.  
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Attorney : Names : PARK, Jang Won  
Code No. : 9-1998-000202-3  
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Inventor : Name : KIM, Jong Tak  
Resident Reg. No.: 710310-1\*\*\*\*\*  
Zip code : 425-150  
Address: 103, 659-2, Il-Dong, Gyeonggi-Do, Korea  
Nationality : Republic of Korea

Request for Examination: Filed

This application is hereby filed pursuant to Article 42 and request for examination is filed pursuant to Article 60 of the Patent Law, respectively.

/S/ Attorney : PARK, Jang Won

[Fee]

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Additional filing fee -	0 Pages	0 WON
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Total -		298,000 WON

[Attached document ]

1. Abstract, Specification (Drawing) -1 copy

[Translation]

## ABSTRACT OF THE DISCLOSURE

[Abstract]

A multimedia messaging service method is disclosed in which, in forwarding a message stored in a transmission side MMS server, only a header of a message desired to be transmitted by a transmission MMS user agent and a phone number of a reception side MMS user agent are transmitted to the transmission side MMS server, to thus reduce a message upload time and a radio load between the transmission side MMS user agent and the MMS server. The multimedia messaging service method in which a message is forwarded between an MMS terminal and an MMS server, including: a step in which the MMS terminal transmits an index value of a message header desired to be transmitted to the MMS server; a step in which the MMS server, which has received the index value of the message header, searches a message having the same message index value as the index value of the message header desired to be transmitted by the MMS terminal among messages which have been stored after being received by the MMS server; and a step in which the MMS server sets a reception side phone number for the searched message and transmits the same.

[Representative drawing]

FIG. 2

## [SPECIFICATION]

### [Title of the Invention]

Multimedia messaging service method

### [Brief description of the Drawings]

FIG. 1 is a view showing a multimedia message transmitting method of a multimedia message service server according to the related art;

FIG. 2 is a flow chart illustrating a multimedia messaging service method according to the present invention; and

FIG. 3 is a flow chart illustrating a message storing method of a multimedia message service server according to the present invention.

### [Detailed description of the invention]

#### [Object of the invention]

#### [Field of the invention and background art]

The present invention relates to a multimedia messaging service method and, more particularly, to a multimedia messaging service method in which, in forwarding a message stored in a transmission side multimedia message service server, only a header of a message desired to be transmitted by a transmission multimedia message service user agent and a phone number of a reception side multimedia message service user agent are transmitted to the transmission side multimedia message service server, to thus reduce a message forwarding time.

In general, preconditions of message forwarding are the presence of a multimedia message received from a VASP (Value Added Service Provider) or a

multimedia message received from a different multimedia message service user.

Namely, there is a message which has been received from a different person, not a message directly created by itself.

FIG. 1 is a view showing a multimedia message transmitting method of a multimedia message service server according to the related art. As shown in FIG. 1, when a multimedia message arrives at a reception side MMS (Multimedia Messaging Service) server, the MMS server stores the message in an MM box.

This operation is required for a message re-transmission later in preparation for a case where a message is not properly received due to a failure of a radio interface while the reception side MMS user agent is receiving the message, and a case where the reception side MMS user agent informs that it will receive a message later.

The storage period is arbitrarily set by the MMS user agent, and in principle, the stored message is automatically deleted when the storage period lapses, and the same message is not repeatedly stored.

Currently, when the reception messages are forwarded, in principle, the transmission side MMS user agent transmits the entire message.

An address or a phone number to which a received message is to be forwarded is inputted and the entire message is transmitted to the transmission side MMS server.

In addition, the transmission side MMS server transmits the message to an MMS server to which the reception side MMS user agent belongs, the reception side MMS server stores the message and then transmits it to the reception side MMS user agent.

[Problem to be solved by the invention]

However, in the related art, when the message stored in the transmission side MMS server is forwarded, the transmission side MMS user agent transmits the entirety of the message intended to be transmitted to the transmission side MMS server, resulting in a waste of radio resources and a transmission time.

Currently, the multimedia message is a combination of an image, text and sound, etc., which is rather small in size, but in the future, the multimedia message would include video such as mpeg4, h.263, and the like, having a considerably increased size, so the transmission time would be more wasted.

Therefore, in order to solve such problem, an object of the present invention is to provide a multimedia messaging service method in which, in forwarding a message stored in a transmission side MMS server, only a header of a message desired to be transmitted by a transmission MMS user agent and a phone number of a reception side MMS user agent are transmitted to the transmission side MMS server, to thus reduce a message upload time and a radio load between the transmission side MMS user agent and the MMS server.

[Construction of the invention]

To achieve these and other advantages and in accordance with the purpose of the present invention, as embodied and broadly described herein, there is provided a multimedia messaging service method in which a message is forwarded between an MMS terminal and an MMS server, including: a step in which the MMS terminal transmits an index value of a message header desired to be transmitted to the MMS server; a step in which the MMS server, which has received the index value of the message header, searches a message having the

same message index value as the index value of the message header desired to be transmitted by the MMS terminal among messages which have been stored after being received by the MMS server; and a step in which the MMS server sets a reception side phone number for the searched message and transmits the same.

The embodiment according to the present invention will now be described in detail with reference to the accompanying drawings.

FIG. 2 is a flow chart illustrating a multimedia messaging service method according to the present invention. As shown in FIG. 2, a multimedia messaging service method in which a message is forwarded between an MMS terminal and an MMS server, includes: a step in which the MMS terminal transmits an index value of a message header desired to be transmitted to the MSM server; a step in which the MMS server, which has received the index value of the message header, searches a message having the same message index value as the index value of the message header desired to be transmitted by the MMS terminal among messages which have been stored after being received by the MMS server; and a step in which the MMS server sets a reception side phone number for the searched message and transmits the same. The operation of the present invention will now be described.

FIG. 3 is a flow chart illustrating a message storing method of a multimedia message service server according to the present invention. As shown in FIG. 3, upon receiving a multimedia message from the transmission side MMS user agent, the reception side MMS server stores the message together with a unique index value of the multimedia message in an MM box and then transmits the message to the reception side MMS user agent.



In this case, the index value of the multimedia message is set as a value excluding '0'.

Thereafter, the reception side MMS user agent may forward the received message to a different MMS user agent as follows.

First, the transmission side MMS user agent inputs a phone number of an address of the reception side MMS user agent, selects the message desired to be forwarded from a memory, and transmits the index value of the corresponding message header information and a phone number of the reception side to the MMS server.

In this case, if the index value of the received message header is '0', the MMS server determines that the currently received message is a newly edited message, receives the message desired by the MMS user agent and transmits the same as it is to the reception side MMS server.

If, however, the index value of the message header received by the MMS server is not '0', the MMS server searches a message having the same unique index value in header information corresponding to the message stored in the MM box.

And then, the MMS server sets the phone number or address information of the reception side in the searched message, and transmits the same to the reception side MMS server.

Accordingly, a message upload time and a radio load between the transmission side MMS user agent and the MMS server can be reduced.

Here, the message retaining time in the MM box is set by the MMS user agent.

Thus, the MMS user agent needs to check the message retaining time in

the MM box set by the MMS user agent itself based on a time point at which the message is stored in the memory upon receiving. The reason is because there is a possibility that the message stored in the MM box might have been deleted at a time point when the stored message is to be forwarded.

Thus, a function is added to automatically change an index field value of a message header to '0' if a message retaining time of the message has lapsed.

The multimedia messaging service method according to the present invention is not limited to the above-described embodiment but can be modified variably within the scope of the present invention.

#### [Effect of the invention]

As so far described, in the multimedia messaging service method according to the present invention, in forwarding a message stored in a transmission side MMS server, only a header of a message desired to be transmitted by a transmission MMS user agent and a phone number of a reception side MMS user agent are transmitted to the transmission side MMS server, so that a message upload time and a radio load between the transmission side MMS user agent and the MMS server can be reduced.

What is claimed is:

1. A multimedia messaging service method in which a message is forwarded between an MMS terminal and an MMS server, comprising:

a step in which the MMS terminal transmits an index value of a message header desired to be transmitted to the MSM server;

a step in which the MMS server, which has received the index value of the message header, searches a message having the same message index value as the index value of the message header desired to be transmitted by the MMS terminal among messages which have been stored after being received by the MMS server; and

a step in which the MMS server sets a reception side phone number for the searched message and transmits the same.

2. The method of claim 1, wherein if the index value of the received header is '0', the MMS server receives the entire data information of the transmission message.

3. The method of claim 1, wherein if the MMS terminal edits a received message and transmits it, the index value of the message header is 0.

4. The method of claim 1, wherein if a retaining time of the message stored in the MMS server lapses, the index value of the message header of the message is automatically changed to '0'

5. The method of claim 4, wherein the retaining time of the message stored in the MMS server is set by a user of the MMS terminal.

Fig. 1

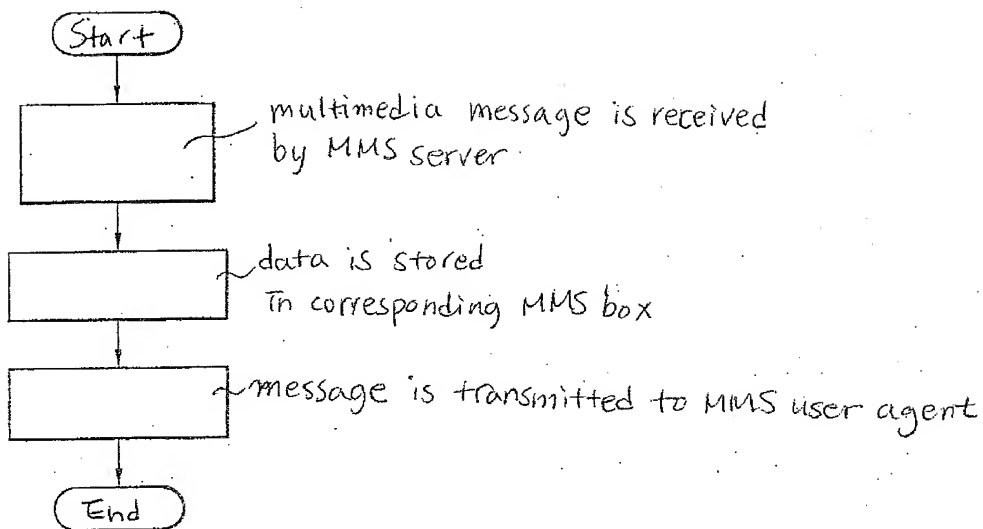
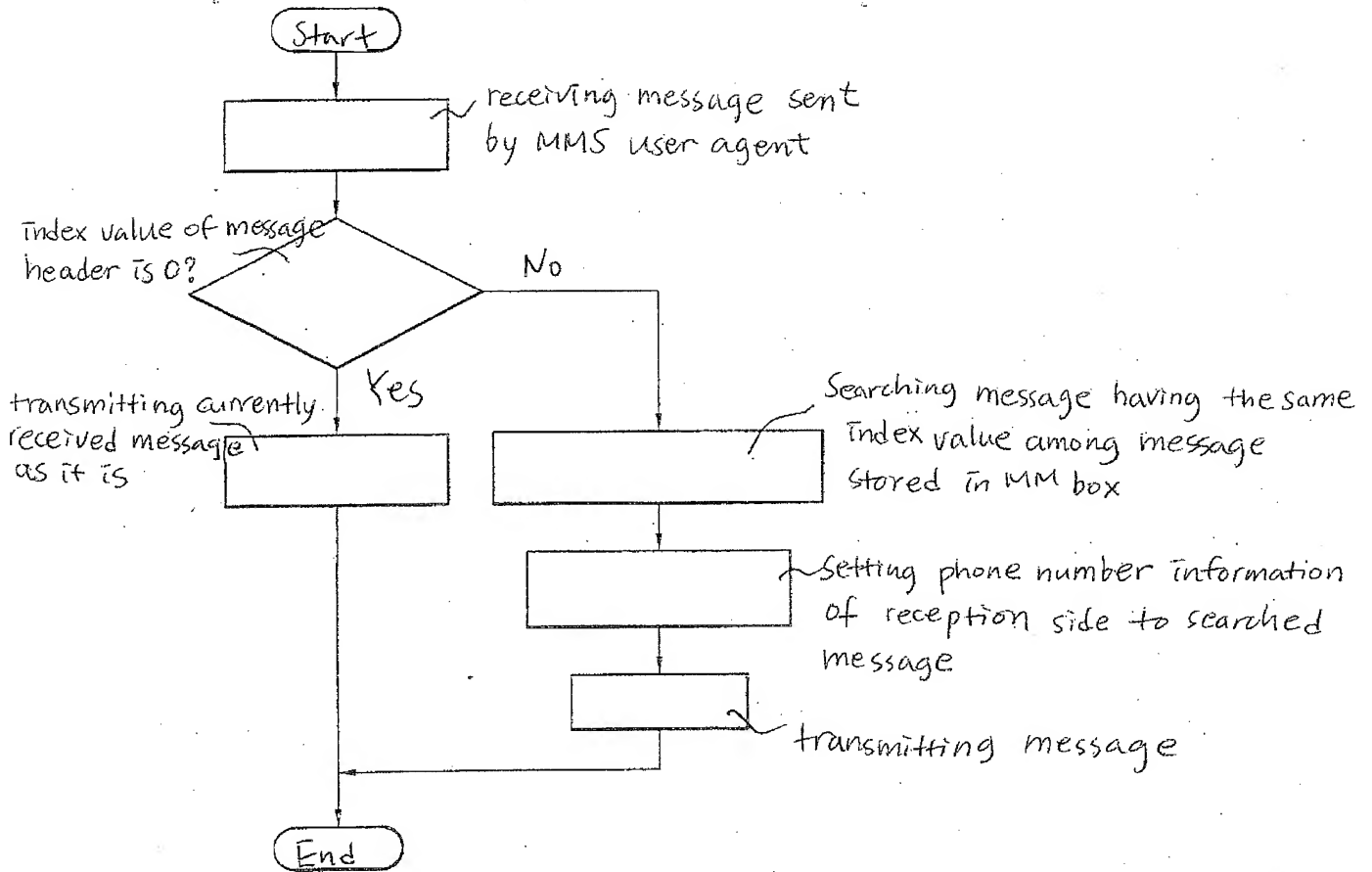


Fig. 2



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Fig.3

